

Methyl Bromide Use and Alternatives Needs in the Food Processing Industry

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Pest control in food processing operations and grain storage, through space fumigation of structures, is an area in which methyl bromide is used as an important element of an integrated pest management approach (IPM). The prospective ban on the availability and use of methyl bromide makes it important that alternatives to its use be identified if a high quality and economically accessible food supply is to be assured.

Methyl bromide has traditionally been used in certain food manufacturing and grain storage facilities as a supplement to IPM. Its use has gained favor because it is fast, effective and safe, when used under carefully controlled conditions. It is especially valuable in situations where sanitation of structural elements, such as high beams or confined spaces, is difficult and risky. It also enhances cleaning of older equipment that was not designed for efficient sanitation and is costly to replace, and it is outstanding as a pest control in either raw materials (e.g. flour) or stored finished products in which infestations have gained a foothold, for whatever reasons.

The need for an alternative to methyl bromide that has comparable qualities results from the fact that no existing alternative appears to be comparably effective. Also, because many food manufacturing facilities will require substantial modifications to utilize technologies and management approaches that have been identified as potential alternatives, the economic impact, as well as the timing of the ban, pose substantial challenges for the food processing industries that currently use methyl bromide. These, in turn, impact the reliability and competitiveness of the American food supply and industry.

Enhanced IPM, heat, heat combined with CO₂, phosphine and other proposed alternatives are all under evaluation and experimentation. Each currently has relative drawbacks compared with methyl bromide, ranging from difficulties in effective implementation in older facilities (enhanced IPM), to damage to electronic controls in increasingly sophisticated manufacturing processes (heat). To date, and to our knowledge, none of the alternatives has proven as effective and reliable as has periodic methyl bromide fumigation, in combination with other approaches, in assuring the high quality food products that both our company and the FDA demand.

For these reasons, we advocate strongly that fumigation alternatives, or comparably effective and economically competitive management approaches for avoiding or controlling infestations in food processing structures, be included on the research agenda for methyl bromide alternatives. While these applications are a relatively low proportion of total methyl bromide use in the world food industry, they are an important - indeed essential - element in assuring the long range supply of high quality, accessible foods.